In the Claims:

Amended

see col. 12

33. (ORIGINAL) A method for removing at least one nitrogen oxide (NO_x) from the exhaust gas of an internal combustion engine, comprising the steps of:

(a) operating an internal combustion engine to produce an exhaust gas flow containing oxygen;

(b) passing exhaust gas containing oxygen over an absorber containing an absorbing layer on a surface of a support member, having a wall thickness ≤ 140 microns

(c) storing the NO_x in the absorbing layer;

(d) heating the absorbing layer to a predetermined temperature during the operation of the engine;

(e) producing an exhaust gas which is poor in oxygen or an exhaust gas having a stoichiometric excess of a reducing agent;

(f) desorbing the NO_x from the absorbing layer and reducing the NO_x in the exhaust gas which is poor in oxygen has a stoichiometric excess of reducing agent while the absorbing layer is a temperature equal to or above the predetermined temperature;

(g) again producing an exhaust gas containing oxygen;

(h) terminating heating of the absorbing layer to the predetermined temperature; and

(j) repeating steps (c) through (h).

34. (CURRENTLY AMENDED) A method according to claim 33 wherein the step of heating the absorbing layer is carried out by at least one step selected from the group consisting of: (a) injecting fuel into the exhaust gas and catalytic combustion thereof, (b) varying the operating conditions of the internal combustion engine, (c) electrical heating of the absorbing layer and (d) using a burner to heat the exhaust gas.

35. (ORIGINAL) A method according to claim 33 wherein, before the step of heating the absorbing layer at least to a predetermined temperature during operation of the internal combustion engine, a step of determining whether a temperature value representing the temperature of the absorbing layer is at or above the predetermined

temperature is carried out and, if it is determined that the temperature value representing the temperature of the absorbing layer is at or above the predetermined temperature, steps (d) and (b) are omitted.

36. (ORIGINAL) A method according to anyone of claims 33-35 wherein the support member is a metal support member.

37. (ORIGINAL) A method according to anyone of claims 33-35 wherein at least one oxide of sulfur (SO_x) is also stored and desorbed by the absorbent layer.

38. (ORIGINAL) A method according to anyone of claims 33-35 wherein the desorption from the absorber layer is carried out at periodic intervals.

39. (ORIGINAL) A method according to anyone of claims 33-35 wherein the desorption from the absorbent layer is carried out depending on the amount of gas stored in the absorbent layer.

40. (ORIGINAL) A method according to anyone of claims 33- 35 wherein the absorbent layer contains gamma-aluminum oxide and at least one element in the group consisting of alkali metals, alkaline-earth metals, rare earths and lanthanum.

41. (ORIGINAL) A method according to anyone of claims 33-35 wherein the exhaust gas is passed over the absorbent layer with turbulence.

42. (ORIGINAL) A method according to anyone of claims 33-35 wherein the support member has a plurality of parallel passages.

43. (CURRENTLY AMENDED) A method according to claim 42 wherein the exhaust gas is passed over a plurality of support members containing the gas absorbing layer and having at least one step selected from the group consisting of: (a) different numbers of passages; (b) passages of different flow diameters; and (c) spacings

between the support members of at least 50 cm.

44. (ORIGINAL) A method according to claim 42 wherein the support member has a plurality of twisted or curved passages.